

Remarks

Claims 1-31 are currently pending in the present application. All claims have been rejected in the Office Action dated November 23, 2004. Independent claims 1 and 18 are cancelled and replaced with new claims 32 and 33, respectively. New independent claim 34 and its dependent claim 35 have also been added. Claims 32 and 34 are method claims corresponding to original claim 1 and claim 33 is an apparatus claim corresponding to original claim 18. Claims 2-8, 10, 11, 15-17, 19, 20, and 22-31 have been amended to change their dependencies in light of new claims 32 and 33, or for clarification. No new matter is added by the amendments made herein. Applicant hereby traverses the rejections as discussed in detail below.

Rejections Under 35 U.S.C. §112

The Office Action rejected independent claims 1 and 18 under 35 USC. §112 as being “indefinite” for use of the phrase “as if they were connected via a LAN.” Claims 1 and 18 have been cancelled and replaced with new claims 32 and 33, respectively. New claims 32 and 33 do not include the above phrase. Rather, claims 32 and 33 discuss steps and components for emulating LAN communications. Applicant respectfully submits that cancellation of claims 1 and 18 removes the rejections and that such rejections would not apply to new claims 32 and 33.

Rejections Under 35 U.S.C. §102

The Office Action repeated earlier rejections to claims 1-10, 16-28, 30 and 31 under 35 U.S.C. §102(e) as being anticipated by US Patent No. 6,487,600 to Lynch. (“Lynch”). On page 16 of the Office Action, *Response to Arguments*, the Examiner noted that certain features discussed in Applicant’s earlier arguments distinguishing over Lynch had not been explicitly cited in amended claim 1 elements A, B, C and D. And that these features could not be read into the claim, citing *In re Van Geuns*. Specifically, the *Response to Arguments* stated:

With regard to Element A, the claim does not specify how the VNG links clients to each other. The reference teaches a network friend that links users to a group or to each other.

With regard to Element B, the claim does not limit the data store from getting information from the clients. The reference teaches

a storage in the network friend that contains information on clients.

With regard to Element C, the process of authentication is not a claimed feature. The reference reads on authenticating clients to a workgroup.

With regard to Element D, the claim language states that the clients can be directly connected with each other. The reference reads on this claim limitation.

Elements A and D

With respect to new independent claims 32 and 33, the above issues raised against former claims 1 and 18 have been addressed by providing further explicit clarifying language within claims 32 and 33. For instance, with regard to new method claim 32, which corresponds to former claim 1, the *Response to Arguments* raised the following issues against Elements A and D (emphasis added):

With regard to Element A, the claim does not specify how the VNG links clients to each other. The reference teaches a network friend that links users to a group or to each other.

...

With regard to Element D, the claim language states that the clients can be directly connected with each other. The reference reads on this claim limitation.

The *linking* of the clients has been clarified in claim 32 – the clients access the VNG system and then the clients link to each other within the PNC and controlled by the VNG system. Lynch does not anticipate this linking or communication *within the PNC and controlled by* a VNG system. That is, claim 32 now states (with emphasis added):

- C. accessing the VNG system by the plurality of clients and authenticating each of said plurality of clients with the VNG system by comparing information provided by the plurality of clients with said PNC information; and
- D. ...
 - b. linking said plurality of clients for communication within the PNC and controlled by the VNG system using the virtual PNC address of each of the plurality of clients and the set of PNC network attributes; and...

Thus, claim 32 specifies how the VNG links clients together, as called for in the Office Action's *Response to Arguments*. The linking of claim 32 is not taught or suggested by the "network

friend” and “metanetwork” of Lynch, as may be appreciated from the following text from Lynch:

Link formation and subsequent communications among network members of a dynamic manifest network are accomplished directly from network member to network member without direct intervention of the network friend 102. However, the network friend 102 (in the described embodiment) does define the potential link structure of each dynamic manifest network and keeps track of such potential link structure(s) in the metanetwork configuration 104. Thus, when a network member initially joins a metanetwork, a local view of the dynamic manifest network that the network member joins is created from the metanetwork. The local view of the dynamic manifest network is then downloaded to the network member (or distributed via computer readable medium) to apprise the network member of the structure and communication rules for the dynamic manifest network. Subsequently, the network member establishes links with, and then communicates, with other network members of the dynamic manifest network according to the structure and communication rules. In another embodiment, however, the definition of the metanetwork is a collection of local views created and maintained by the network members. In such a structure, the network friend is not required.

(Lynch, col. 6 line 51- col. 7, line 5, emphasis added)

Thus, the network friend is optional – it is simply a mechanism for providing the “local view” to the network members. Even when the network friend is used, it does not participate in the actual communications between network members. This is explicitly and directly in contrast with the present invention as recited in claim 32. In the present invention the PNC is established on the VNG system and the clients that communicate within the PNC are communicating under the control of the VNG system. But Lynch’s network friend does not at a system that controls the communication among the clients. Rather, according to Lynch, the *network friend*, which is not even required, is a mechanism to provide the “local view” to each network member – but it does not participate in the communication between the network members. In the above quotation, the distinction is explicit in Lynch:

communications among network members of a dynamic manifest network are accomplished directly from network member to network member without direct intervention of the network friend 102.

Therefore, the linking of clients under control of the VNG system, taught by claim 32 (and

particularly element D.b.) is not anticipated by Lynch.

Elements B

The *Response to Arguments* for Element B of original claim 1 addressed the VNG data store. New claim 32 Element B also addresses the VNG data store. Applicant also points that, with respect to the VNG data store, rather than whether or not the VNG data store could get information from clients, the Applicant believes that the claimed method distinguishes over Lynch with respect to the PNC information and how the PNC information is used by the VNG system to establish the PNC and enable communications among the clients under control of the VNG system. The *Response to Arguments* stated:

With regard to Element B, the claim does not limit the data store from getting information from the clients. The reference teaches a storage in the network friend that contains information on clients.

The above comments regarding Element B appear to be based on a presumption that the VNG system is anticipated by the network friend of Lynch – Applicant contends that such a presumption is not valid given the analysis above with respect to the VNG system and linking discussed with respect to Elements A and D. It has been clarified in Element B of claim 32 that the VNG system includes the VNG data store, as follows:

- A. providing a virtual network generation (VNG) system including a VNG data store;
- B. storing in the VNG data store PNC information including information identifying said plurality of clients and information identifying a set of PNC network attributes;
- C. accessing the VNG system by the plurality of clients and authenticating each of said plurality of clients with the VNG system by comparing information provided by the plurality of clients with said PNC information; ...
- D. establishing said PNC as a function of the PNC information, including:
 - ...
 - b. linking said plurality of clients for communication within the PNC and controlled by the VNG system using the virtual PNC address of each of the plurality of clients and the set of PNC network attributes;

c. emulating local area network (LAN) communications
among the plurality of clients by the VNG system.

That is, Lynch teaches a system where the clients communicate directly, while the present invention is a system and method where the clients communicate within a PNC under control of the VNG system. Since the VNG system is actively involved in the communications among its clients, the PNC information stored in the VNG data store is used by the VNG system to support those communications. However, since the network friend of Lynch downloads the “local view” of the metanetwork to its clients to allow the network members to communicate directly (i.e., not under the control of the network friend), there network friend does not store PNC information – as that phrase is used with respect to the present invention. Because the communications structure fundamentally differs between the present invention and Lynch, so too must the information they store and use. That is, the network friend does not store or access information that allows the network friend to establish the PNC and to allow the network friend to be actively involved in the communication among the clients.

It should also be noted that claim 32 provides that the communications among the clients provided by the VNG system and within the PNC occurs within an emulated LAN, as function of the PNC information stored in the PNC data store. Lynch certainly does not discuss emulating a LAN with the data provided in the “local view”, which is provided by the network friend to the network members.

Therefore, a VNG data store having PNC information that allows the VNG system to establish the PNC and to emulate a LAN for communication of clients controlled by the VNG system is not anticipated by Lynch.

Element C

The *Response to Arguments* for Element C of original claim 1 addressed authenticating the clients as a function of the PNC information. New claim 32 also addresses authentication in its element C. The *Response to Arguments* stated:

With regard to Element C, the process of authentication is not a claimed feature. The reference reads on authenticating clients to a

workgroup.

Further clarification has been provided in Element C of claim 32, as follows:

- C. accessing the VNG system by the plurality of clients and authenticating each of said plurality of clients with the VNG system by comparing information provided by the plurality of clients with said PNC information;

Thus the method of authentication has been further clarified as requested, such that authentication is accomplished with the VNG system, and not among the clients – as in Lynch. That is, Lynch discloses authentication to be between network members, as follows:

Further, authentication rules are set in place so that, prior to the exchange of a communication between network members across a link (two network members) the network members authenticate each other. Further, once the network members have authenticated each other, encryption/decryption rules may be enacted to further secure the communications across the link.

(Lynch, col. 4 lines 36-39, emphasis added)

Therefore, authentication as provided in claim 32 is not anticipated by Lynch.

Emulation

Beyond the other distinctions discussed above, it should be appreciated that Lynch does not anticipate establishing a PNC that is an emulated LAN (See, e.g., Application, p. 5 lines 9-15). Rather, Lynch discloses a ***dynamic manifest network*** where network members can communicate – but there is no suggestions that this network is an emulated LAN, as an example of an intranet. For example, the Abstract of Lynch discloses:

A dynamically configured user network services a plurality of network members. A metanetwork definition identifies the members of the dynamic manifest network and provides the rules by which the network members establish links among themselves and communicate. Each of the network members employs a client communication device to communicate with another network member according to the metanetwork definition. Another centrally located computer, a network friend, may assist in setting upon and managing

the dynamic manifest network via creating and altering the metanetwork definition. ... The network friend has the basic structure of a web server ... A metanetwork definition is setup by an initiating network member. The metanetwork definition defines the dynamic manifest network and how communications will occur within the dynamic manifest network. A local view of the metanetwork is then created for each network member. A respective local view of the metanetwork is then provided to each network member. Each network member then establishes links with other network members and communicates with the other network members according to the local view. (Lynch, Abstract, emphasis added)

Having no discussion of emulating a LAN (or intranet), Lynch does not anticipate claim 32 which does emulate a LAN. Thus, there is yet another point of distinction between Lynch and claim 32.

For all of the foregoing reasons, Lynch does not anticipate claim 32. The Applicant respectfully requests allowance of this claim. For the same reasons, Applicant asserts that Lynch does not anticipate those claims that depend from claim 32. Accordingly, Applicant further requests allowance of claims 2-17, which depend from claim 32.

Claim 33 is an apparatus claim that corresponds to method claim 32. Therefore, for the same reasons put forth with respect to claim 32, claim 33 is also not anticipated by Lynch. Accordingly, Applicant respectfully requests allowance of claim 32 and its dependent claims 19-31.

Claim 34 includes elements similar to those provided above in claims 32 and 33. The distinctions of the VNG establishing the PNC and the clients communication within a PNC under control of the VNG are present in claim 34. Accordingly, claim 34 is not anticipated by Lynch, nor is its dependent claim 35. Accordingly, Applicant also request allowance of claims 34 and 35.

Rejections Under 35 USC. §103

The Office Action rejects claims 11-15 and 29 under 35 U.S.C. §103(a) as being unpatentable over US Patent No. 6,487,600 to Lynch ("Lynch") in view of US Patent No. 6,427,071 to Adams et al. ("Adams et al") The office action acknowledges that Lynch does not anticipate or make obvious wrapping and unwrapping packets, but asserts that Adams does teach this. Generally, the Applicant

asserts that there is no motivation to combine Lynch and Adams, since Adams discloses secure communication between "a controller and a signaling network" (see Abstract of Adams) and Lynch teaches establishing communication between two network members (as peers). Nevertheless, assuming the combination, the Applicant believes the two references do not make obvious claims 11-15 and 29.

Claims 11-15 depend now from claim 32, discussed in detail above with respect to Lynch. Therefore, Applicant believes that, like independent claim 32, dependent claims 11-15 are patentable over Lynch, even if combined with Adams. Accordingly, Applicant respectfully requests removal of the rejections to claims 11-15.

Claim 29 depends from claim 33, discussed in detail above with respect to Lynch. Therefore, Applicant believes that, like independent claim 33, dependent claim 29 is patentable over Lynch, even if combined with Adams. Accordingly, Applicant respectfully requests removal of the rejections to claim 29.

Conclusion

Applicant respectfully requests removal of the foregoing rejections and allowance of claims 2-17, 19-35, as variously amended herein. The Commissioner is hereby authorized to charge any additional fees under 37 C.F.R. §1.16 and §1.17 that may be required, or credit any overpayment, to our Deposit Account No. 50-1133.

Respectfully submitted,



David M. Mello, Reg. No. 43,799
McDermott Will & Emery LLP
28 State Street
Boston, MA 02109
Tel (617) 535-4037
Fax (617) 535-3800
E: dmello@mwe.com

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